

NTCA 2004 WIRELESS SURVEY REPORT

December 2004

DISCLAIMER: Data from the survey has been presented as reported.

To get more information on this report please contact Rick Schadelbauer at NTCA (703-351-2019, richards@ntca.org) or Jill Canfield at NTCA (703-351-2020, jcanfield@ntca.org).

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EXECUTIVE SUMMARY

In the fall of 2004, the National Telecommunications Cooperative Association (NTCA) surveyed its members on their activities in the area of providing wireless services to their customers. The survey was sent to each of the companies in NTCA's membership database; 105 members (23%) responded.

Fifty-seven percent of survey respondents indicated that they hold at least one wireless license; 59% are providing wireless service to their customers. Sixty-four percent of those providing wireless service offer broadband, 42% mobile voice, 29% data, and 27% paging. Sixty-five percent of those respondents not currently offering wireless service are considering doing so.

The average total (cumulative) investment in wireless facilities, excluding spectrum, is \$2.6 million; average total (cumulative) investment in spectrum totaled \$455,000.

Two-thirds of survey respondents characterized the process of obtaining financing for wireless projects as ranging between "somewhat difficult" and "virtually impossible." Thirteen percent have sought an RUS loan for the deployment of wireless or broadband services.

Forty-four percent of respondents are utilizing unlicensed spectrum to provide some wireless services to their customers. Given the choice, however, 69% would prefer access to additional licensed spectrum over additional unlicensed spectrum.

More than half of all respondents indicated that competition from nationwide carriers was their greatest concern, 50% selected the ability to make necessary investments, and 28% their ability to obtain spectrum at auction. Twelve percent noted other concerns, such as the ability to obtain cost effective equipment, the ability to secure roaming agreements, rural population depletion, and changing regulations.

Of those respondents providing CMRS services, 32% each utilize TDMA, CDMA, and GSM, and 5% AMPS. The average subscriber's monthly wireless bill is just over \$49.

Nineteen percent of respondents serve as a local presence for a national carrier, or market a national brand; 74% have a partnership agreement with a national wireless carrier to handle their roaming traffic at a contracted fee. Approximately three-quarters find it difficult to compete with promotions offered by the national carriers.

Forty-five percent of respondents offer their wireless customers voice mail, 40% each offer three-way calling and caller ID, and 35% each offer text messaging, prepaid service, family plans and bonus night/weekend minutes. Sixty-four percent of survey respondents

experience annual customer churn of less than 10%, while 32% reported annual churn of between 10% and 25%. These figures are well below the FCC's reported industry annual average of between 18% and 42%.

INTRODUCTION

In late fall of 2004, the National Telecommunications Cooperative Association (NTCA) surveyed its members on their activities in the areas of providing wireless services to their members/customers. NTCA is a national association of approximately 560 local exchange carriers in 44 states that provide service primarily in rural areas.

Approximately 300 of NTCA's member companies offer some type of wireless service. All NTCA members are small carriers that are "rural telephone companies" as defined in the Telecommunications Act of 1996 ("Act"). While some offer local exchange service to as few as 44 lines and a small handful to 90,000 or more, nearly 50% of NTCA members serve between 1,000 and 5,000 lines. Population density in most member service areas is in the 1 to 5 customers per square mile range. Approximately half of NTCA's members are organized as cooperatives and the other half are commercial companies.

This latest wireless survey is a follow-up to a similar survey last conducted by NTCA in 2003, and seeks to build upon the results of that survey¹.

OVERVIEW OF SURVEY

The 2004 NTCA Wireless Survey was conducted online. Member companies were provided with a URL through which they could access the survey. Every effort was made to minimize the reporting burden on the survey respondents.

The survey itself was organized into two sections. The first section was comprised of general questions about the respondent's current operations and future plans. The second section, which applied only to those respondents providing CMRS services to their customers, asked more specific questions about technology, customers, revenues, features offered, and capabilities.

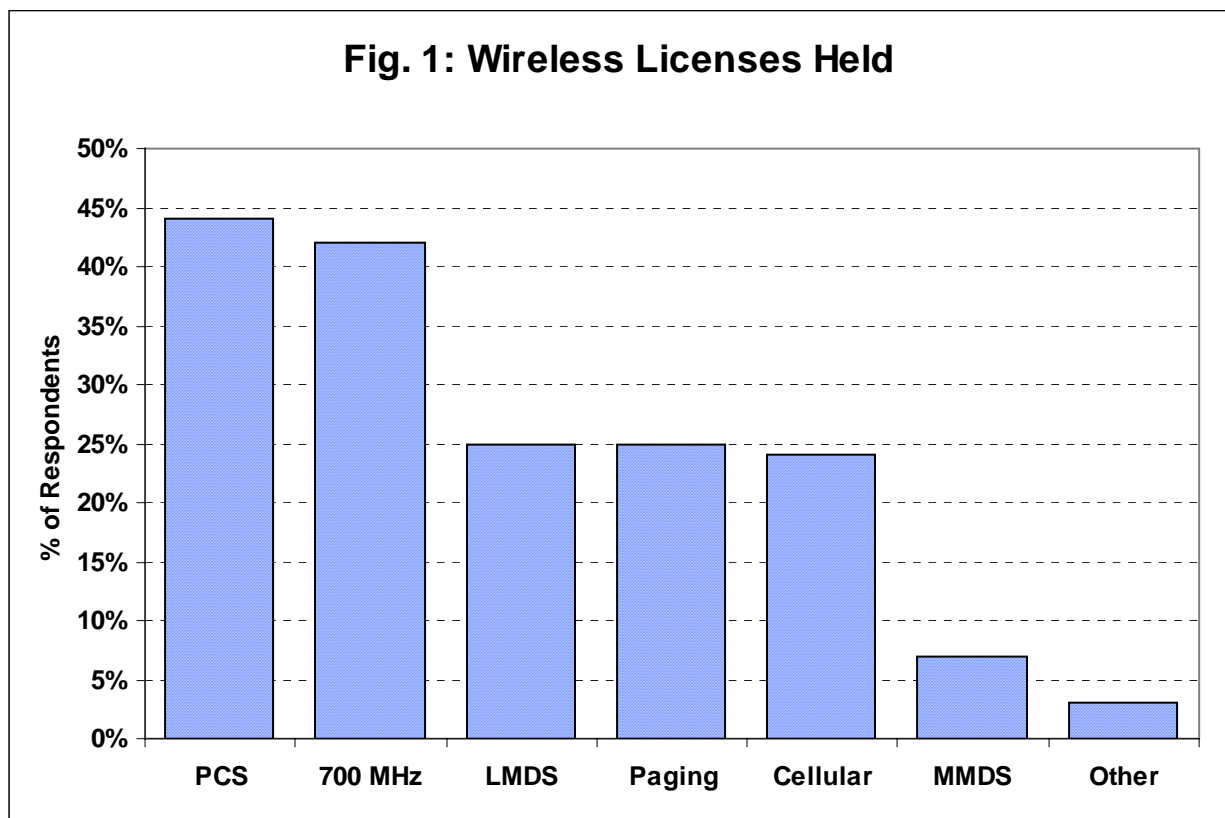
SURVEY RESULTS

The survey URL was distributed via email and fax to all of the NTCA member companies in NTCA's database. The messages contained instructions for online access to the survey. Responses were received from 105 member companies, a 23% response rate. Twenty percent of those NTCA member companies providing wireless service responded to the survey, as well as 29% of those providing PCS service, and 21% of those providing MMDS.

¹ Copies of this and previous NTCA survey reports may be downloaded from the NTCA website, www.ntca.org.

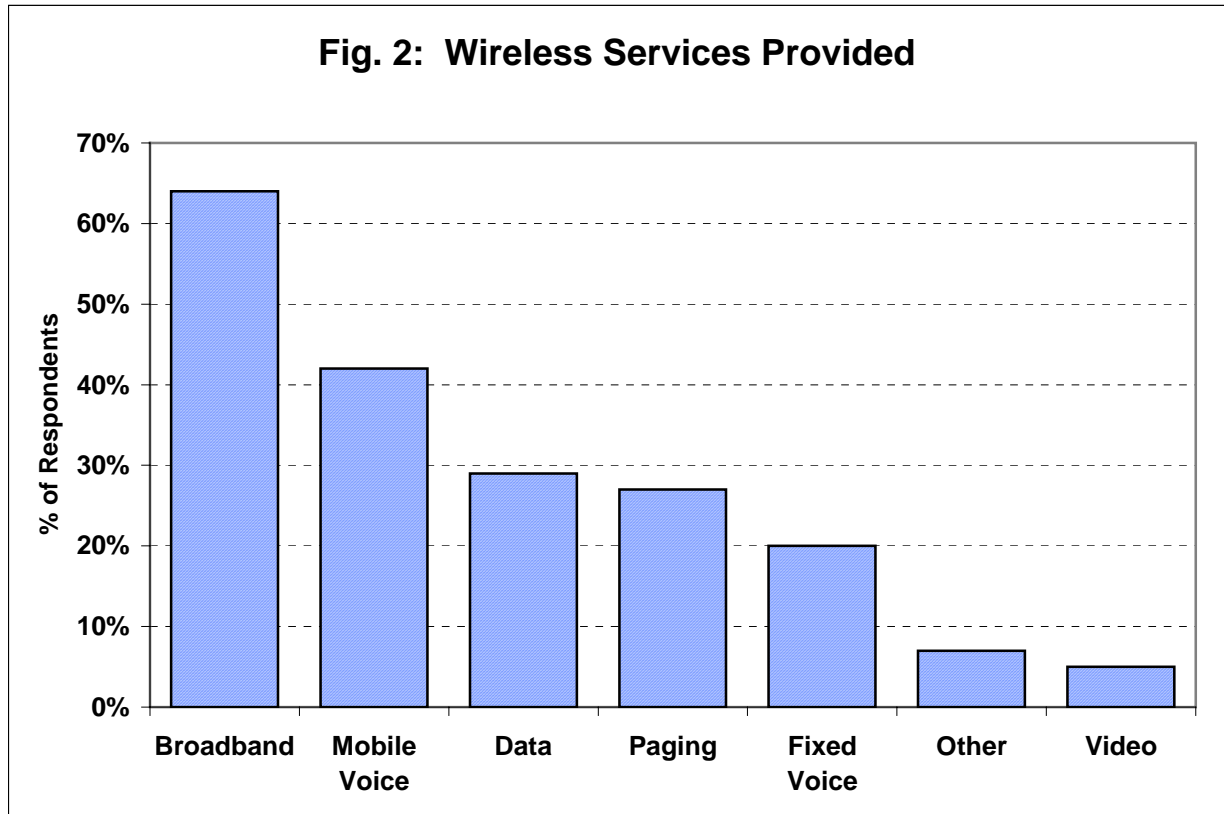
Survey responses were received from companies in 29 states. Those respondents providing wireless services range in size from approximately 700 wireless customers to more than 18,600, and the average respondent served 8,900 wireless customers. This heterogeneity in size and geographic location mirrors that of NTCA's membership as a whole.

Fifty-seven percent of survey respondents indicated that they currently hold at least one wireless license. Forty-four percent of those who hold a license have a PCS license, 42% 700 MHz, 25% each LMDS and paging, and 24% cellular. (See Fig. 1.)



Note: Totals exceed 100% as carriers may hold more than one wireless license.

Fifty-nine percent of survey respondents are providing wireless services to their customers². Of those providing wireless service, 64% offer broadband³, 42% mobile voice, 29% data, 27% paging, and 20% fixed voice. (See Fig. 2.)



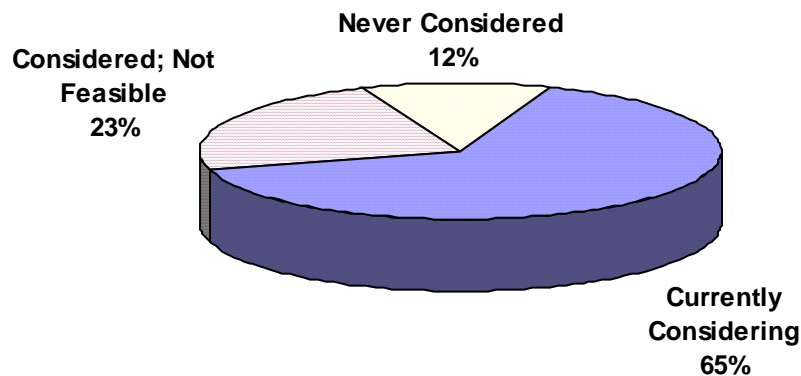
Note: Totals exceed 100% as carriers may provide more than one wireless service.

² Includes respondents utilizing unlicensed spectrum to provide wireless service.

³ For the purposes of this survey, broadband is defined to be data transmission speeds of at least 200 kilobits per second in one direction.

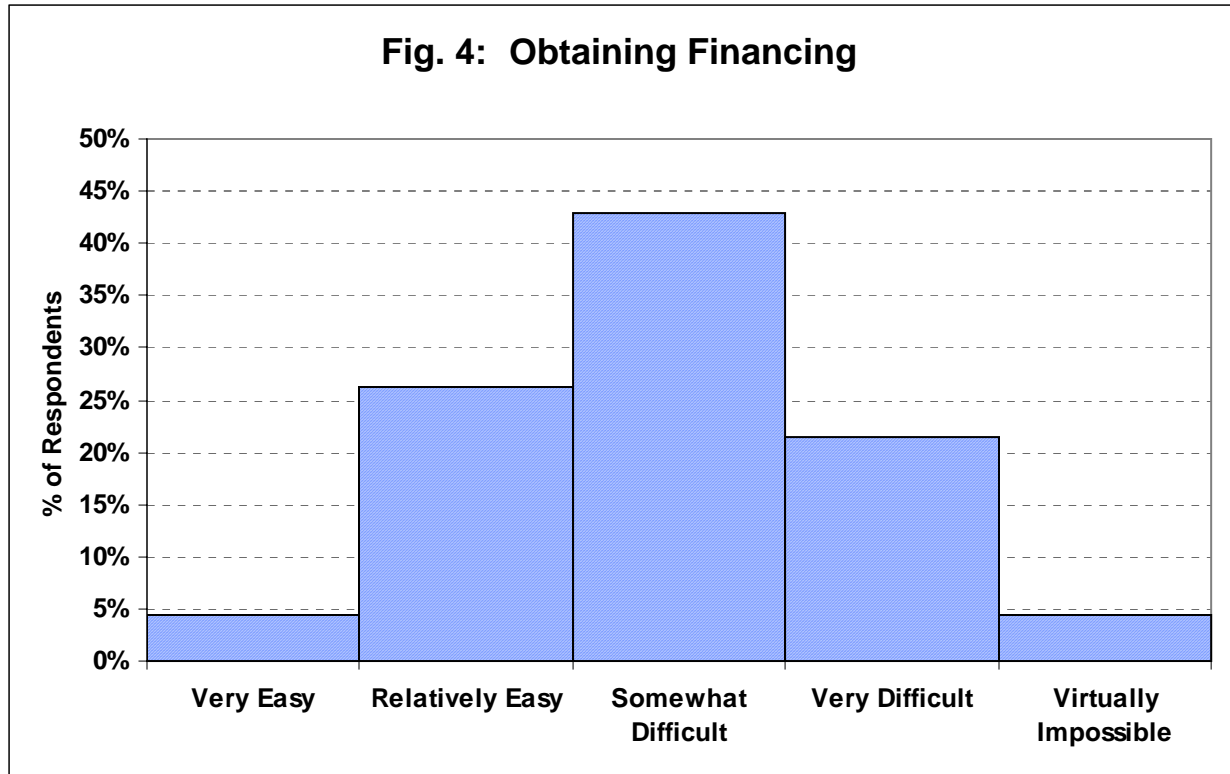
Sixty-five percent of those respondents not currently offering wireless service indicated they are considering doing so. Twenty-three percent have previously considered offering wireless service and deemed it not feasible, while 12% have never considered wireless. (See Fig. 3.)

Fig. 3: Future Wireless Plans?



Survey respondents indicated that they have invested considerable resources in wireless. The average total (cumulative) investment in wireless facilities, excluding spectrum, was \$2.6 million, ranging from a high of \$20 million to a low of \$20,000. Average total (cumulative) investment in spectrum totaled \$455,000. Survey respondents invested an average of \$556,000 in wireless facilities in the twelve-month period prior to the survey.

Obtaining financing for wireless projects continues to pose a challenge for survey respondents. Of those with experience in obtaining financing, 43% categorized the experience as “somewhat difficult,” 26% “relatively easy,” and 21% “very difficult”. Two-thirds characterized the process as ranging within “somewhat difficult” to “virtually impossible.” (See Fig. 4.)



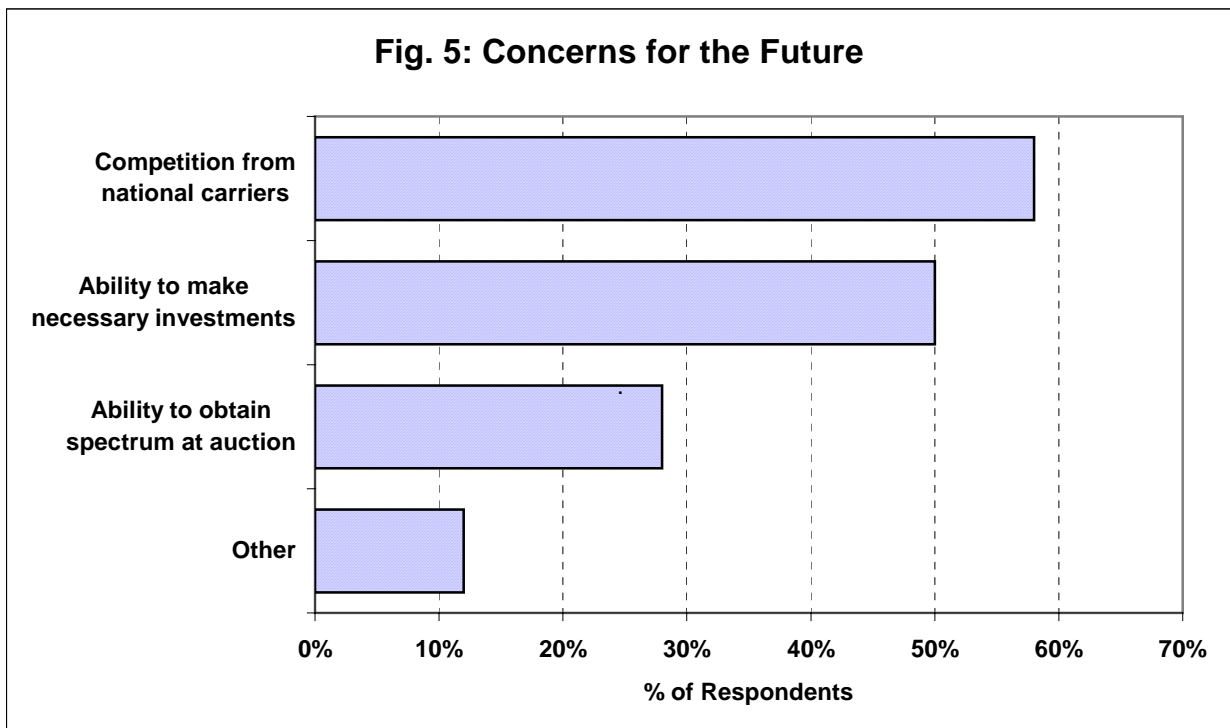
Thirteen percent of respondents have sought an RUS loan for the deployment of wireless or broadband services. Ninety-two percent of those respondents indicated that their efforts were either successful or still pending.

Ten percent of survey respondents indicated that they had acquired spectrum in the preceding twelve-month period, while another 10% made arrangements for the utilization of previously acquired spectrum. Eight percent entered into negotiations for the acquisition of spectrum.

Forty-five percent of survey respondents are looking to expand their wireless service area. Sixty-eight percent are looking to serve both their wireline service area and neighboring territories; 19% seek to serve neighboring territories only; and 13% their own wireline service territory only.

Forty-four percent of survey respondents are utilizing unlicensed spectrum to provide wireless services to their customers. Among the services identified are Wi-Fi, point-to-point microwave, and voice. Fifty-four percent of those respondents using wireless spectrum indicated that they had experienced difficulties with interference. Given their choice, respondents indicated they would prefer access to additional licensed spectrum over additional unlicensed spectrum by a 69% to 31% margin. The most desired spectrum among survey respondents was 700 MHz, cited by 47% of those who indicated they wished to add additional spectrum. PCS and MMDS were a distant second and third at 22% and 16%, respectively.

Respondents intend to offer their customers a wide variety of new services over the next 12 to 18 month period: cellular and fixed wireless broadband, VoIP, WiMax, GSM/GPRS, fixed wireless, bundled voice, data and Internet, video over DSL, and push-to-talk were all noted. A number of concerns, however, threaten survey respondents' future plans. Fifty-eight percent indicated that they were concerned about competition from national carriers, 50% cited their ability to make the investments necessary to continue to provide the latest services, and 28% their ability to obtain spectrum at auction. Twelve percent noted other concerns, such as their ability to obtain cost-effective equipment, difficulty in negotiating roaming agreements, rural population depletion, and the lack of a level playing field in the regulatory arena. (See Fig. 5.)



Note: Totals exceed 100% as respondents were allowed to select more than one concern.

Survey respondents are facing considerable competition from other carriers—the average respondent indicated that their company competes with between three and six other carriers.

Of those respondents providing CMRS services, 32% each utilize TDMA, CDMA, and GSM, and 5% AMPS. Of the 37% utilizing either TDMA or AMPS, all indicated that they intend to upgrade within the next 12 months, with GSM preferred over CDMA by a three to two margin.

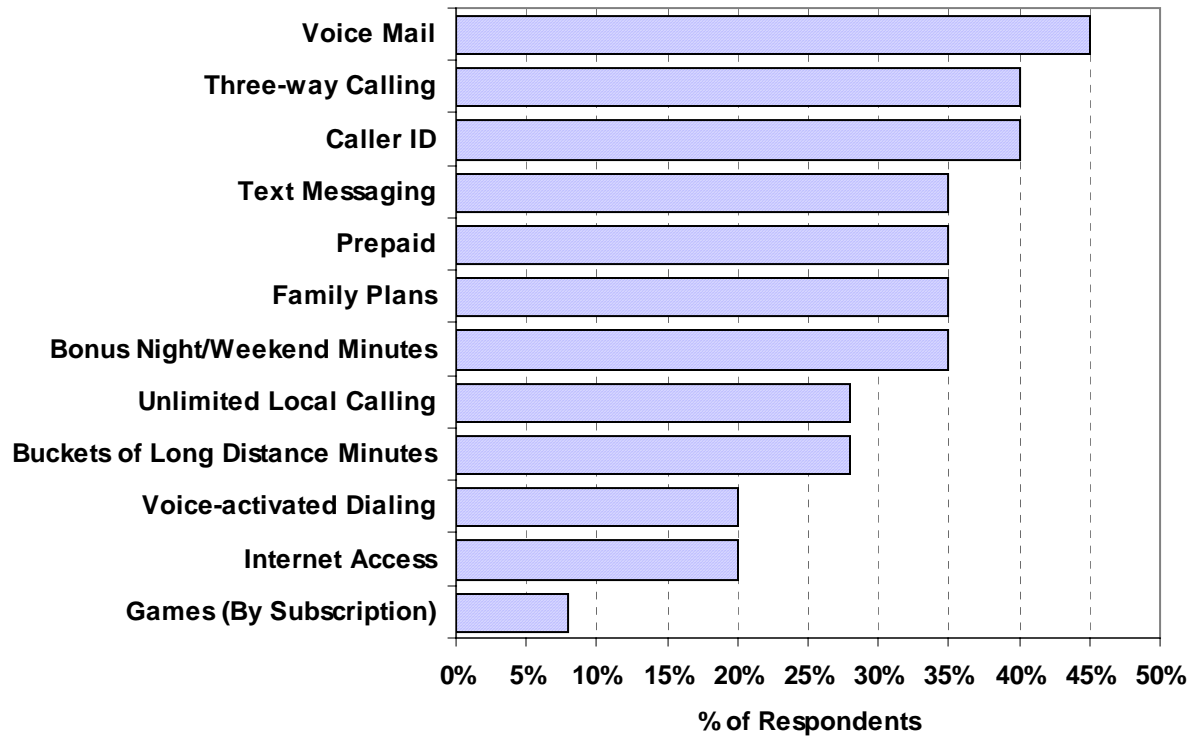
Sixty-five percent of survey respondents are E911 compliant, and 79% support wireless number portability.

Nineteen percent of survey respondents serve as a local presence for a national carrier, or market a national brand. Seventy-four percent have a partnership agreement with a national wireless carrier (AT&T, Verizon, Cingular, Sprint, T-Mobile, Nextel) to handle their roaming traffic at a contracted fee. Roaming revenues are significant income streams for many respondents. While 29% of respondents indicated that roaming revenues account for less than 10% of their overall revenues, 36% reported roaming accounts for between 11% and 40% of total revenues, and 36% more than 40% of total revenues.

The average customer's monthly wireless bill is just over \$49. Forty-five percent of survey respondents offer a wireless package that they feel is competitive with the national carriers, while 76% find it difficult to compete with promotions—such as buckets of long-distance minutes—being offered by the national carriers.

Survey respondents offer myriad features to their wireless customers. Forty-five percent of those respondents providing wireless service offer voice mail; 40% each offer three-way calling and caller ID; and 35% each offer text messaging, prepaid service, family plans and bonus night/weekend minutes. (See Fig. 6.)

Fig. 6: Features Offered to Wireless Customers



Note: Totals exceed 100% as respondents may provide more than one wireless feature.

Respondents indicated considerable customer loyalty. Sixty-four percent experienced an annual customer churn rate of less than 10%, while 32% reported annual customer churn of between 10% and 25%. This compares to the FCC's estimate of industry-wide churn rate monthly averages of 1.5% to 3.5%, or from 18% to 42% annually.⁴ This could indicate that the impact of wireless number portability has been greater on the larger providers than on the smaller, rural-based companies.

⁴ Federal Communications Commission, *Ninth Report on Competitive Market Conditions in the CMRS Industry*, FCC 04-216, WT Docket No. 04-111, September 2004, at 68.

CONCLUSIONS

Survey respondents find themselves locked in a competitive struggle with larger, nationwide carriers. Competition from nationwide carriers was a significant concern for the majority of survey respondents. Several respondents indicated that they compete with as many as a half dozen other carriers. In order to effectively compete, these small carriers must be able to count on a level regulatory playing field.

The ability to obtain financing for wireless projects remains a key concern for NTCA member companies. Half of all survey respondents cited obtaining financing as a major concern for the future, and other indicated that financial concerns were preventing them from utilizing previously obtained spectrum. Unless rural companies are able to obtain sufficient financing at reasonable cost, their ability to compete will be dramatically impacted.

Many NTCA member companies not currently in the wireless game wish to participate. Survey results show that two-thirds of those respondents not currently offering wireless wish to do so, in spite of the significant barriers that must be overcome. Participation in the rural markets by these companies, who are familiar with the peculiarities associated with serving rural customers, can only improve the overall quality of service in these areas.

Numerous survey respondents have turned to unlicensed spectrum as a means of providing some wireless service, despite the inherent difficulties. Interference is cited as a major problem by those using unlicensed spectrum. The majority would prefer access to additional licensed spectrum. Facilitating that wish will, again, improve the quality of service provided to rural consumers.